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<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>	Application Number	09/438,206	
	Filing Date	November 12, 1999	
	First Named Inventor	Riyi Shi et al.	
	Group Art Unit	1623	
	Examiner Name		
Total Number of Pages in This Submission	5*	Attorney Docket Number	7024-427/PUR-100

 MAR 31 2000  
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* including this transmittal form		ENCLOSURES (check all that apply)	
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## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Jason J. Schwartz Woodard, Emhardt, Naughton, Moriarty & McNett
Signature	
Date	March 21, 2000

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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTORNEY DOCKET NO.	DRWGS	TOT CL	IND CL
09/438,206	11/12/99	1623	\$843.00	7024-427-PUR	14	21	3

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Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts of Application" ("Missing Parts Notice") in this application, please submit any corrections to this Filing Receipt with your reply to the "Missing Parts Notice." When the PTO processes the reply to the "Missing Parts Notice," the PTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s) RIYI SHI, WEST LAFAYETTE, IN; RICHARD B. BORGES,  
DELPHI, IN.

IF REQUIRED, FOREIGN FILING LICENSE GRANTED 12/13/99 \*\* SMALL ENTITY \*\*  
TITLE  
METHOD<sup>S</sup> AND COMPOSITIONS FOR TREATING MAMMALIAN SPINAL CORD INJURIES  
PRELIMINARY CLASS: 514

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FEB 04 2000

Woodard, Emhardt, Naughton  
Moriarty & McNett

DATA ENTRY BY: BATIE, MARGARET

TEAM: 01 DATE: 01/27/00

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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*Jason J. Schwartz*

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*MARCH 21, 2000*

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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of: )  
)  
Riyi Shi et al. )  
)  
Serial No. 09/438,206 )  
)  
Filed: November 12, 1999 )  
)  
METHODS AND COMPOSITIONS FOR )  
TREATING MAMMALIAN SPINAL )  
CORD INJURIES )

Group Art Unit 1623

March 21, 2000

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## PETITION FOR CORRECTED FILING RECEIPT

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Sir:

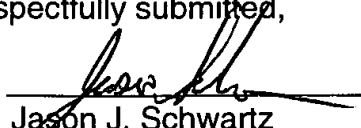
Please include the parent provisional application's filing date and serial number on the filing receipt in order to correctly reflect the parentage of this patent application. This information appears on the first page of the specification of this application, a copy of which is attached herewith for your convenience.

Also, please note that "METHOD" in the title of this application, as it currently appears on the filing receipt, should be "METHODS". This can also be found on the first page of the attached patent application's specification.

Please issue a corrected filing receipt for this application.

Respectfully submitted,

By

  
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7024-427:PUR-100:66597

**METHODS AND COMPOSITIONS FOR TREATING MAMMALIAN  
SPINAL CORD INJURIES**

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This invention was made with government support under grant number DAMD17-94-J-4242 awarded by the Department of the Army and grant number BES9631560 awarded by the National Science Foundation. The Government has certain rights in the invention.

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**CROSS-REFERENCE TO RELATED APPLICATIONS**

The present application claims the benefit of U.S. Provisional Application Serial Number 60/108,145, filed on November 12, 1998, which is hereby incorporated by reference in its entirety.

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**BACKGROUND OF THE INVENTION**

The present invention relates generally to methods for treating an injured spinal cord. Specifically, the invention relates to methods for treating an injured spinal cord that include contacting the spinal cord with a biomembrane fusion agent. Pharmaceutical compositions for treating an injured spinal cord are also described.

The devastating effects of injury to the mammalian spinal cord are not immediate. Severe mechanical injury initiates a delayed destruction of spinal cord tissue producing a loss in nerve impulse conduction associated with a progressive local dissolution of nerve fibers (axons) [Honmou, O. and Young, W. (1995) *The Axon* (Waxman, S.G., et al., Eds.) pp. 480-529, Oxford University Press, New York; Griffin, J.W. et al. (1995) *The Axon* (Waxman, S.G., et al., Eds.) pp. 375-390, Oxford University Press, New York]. This loss of sensory and motor communication across the injury site can produce a permanent paralysis and loss of sensation in regions below the level of the spinal injury. Furthermore, it is clear the most damaging effects of progressive "secondary injury" [Young, W. (1993) *J. Emerg. Med.* 11:13-22] of spinal cord parenchyma relative to the loss of behavioral